ABSTRACT OF THE DISCLOSURE

An optical element is provided in which in a lens surface substantially perpendicular to the optical axis of the lens, there is embedded a conductive member whose diameter or width is smaller than the diameter of an optical spot incident upon the lens surface. The optical element is used in an optical head which reads a signal by illuminating an optical recording medium with a reading light. The basic principle of this optical head is such that a subtle phase change of the light is detected which is caused by the electromagnetic interaction between the conductive member embedded in the optical element and a conductive material on the surface of the optical recording medium. For example, the interference between return light beams from the optical recording medium is used to read a signal. Alternately, a high frequency current is supplied to the conductive material and a signal synchronous with the high frequency is extracted to detect the interaction between the conductive material on the optical recording medium and the conductive member, to thereby read a signal recorded in the optical recording medium.